

Geographic Review Panel 3 – American River/Eastside Tribes

Proposal number: 2001-C202

Short Proposal Title: Geomorphic Stream Restoration Project

1. Applicability to CALFED ERP Goals and Implementation Plan and CVPIA priorities, and relevance to ERP and CVPIA priorities for your region. This project is relevant to the goals 1, 2 and 3 of the CALFED ERP, and to the general restoration goals of CVPIA. In essence, the project proposes to reconnect this portion of the river to potential spawning habitat now perched above the flow levels typical of the fall run chinook salmon spawning period, and to create a floodplain element within the deeply incised channel. If successfully implemented, the project could increase potential spawning habitat, and reduce forces on eroding banks by providing greater accessibility between the river and new floodplain.

2. Linkages/coordination with previously funded projects or other restoration activities in your region. The proposed work is to be integrated with research, survey and restoration projects currently taking place in the upper Cosumnes River watershed, including DFG, UC Davis, the Fishery Foundation of California (FFC), and the Cosumnes River Task Force (CRTF). There are letters of support and commitments of cooperation from FF and the CRTF. It's assumed that the information collected by various programs in DFG or by the folks at UC Davis will be made available as needed to the project proponent. However, there are no letters of support or cooperation included in the proposal. Additionally, requests for proprietary rights to CALFED-funded data by investigators attached to UC Davis indicate the project applicant's assumption is incorrect that they'll have access to these data as needed.

3. Feasibility, especially the project's ability to move forward in a timely and successful manner. Yes, the proposed work is technically feasible. However, the project proponents clearly need some help with the channel design, the riparian re-vegetation component, and with the physical and biologic monitoring plan (see specific comments below in item 4). This expertise is locally available, and if it can be acquired within the context of the original budget the project should be able to move forward on the proposed timeline.

4. Qualifications of the applicants and others involved in implementing the proposed project. The project proponents have a good background in hydrologic modeling, but essentially no experience with hands-on design and construction of geomorphically-based stream restoration projects or riparian revegetation. This lack of experience is reflected in several significant project assumptions, and in several critical areas of project design and post-project monitoring. Specifically:

- The assumptions that locally-derived fine sediment is limiting spawning habitat. This may well be the case. However, the project proponent provides no evidence in support of either assumption although a major and costly project element is the removal and cleansing of project area gravels.
- The possibility that fines may not be locally derived is not addressed, which makes it impossible to evaluate whether the benefits relative to the costs associated with large-scale gravel cleansing will ever be realized.
- That no consideration has been given to the influence of upstream sediment sources suggests that the influence of sediment supply on channel design similarly hasn't been considered.

- The monitoring timeline of 2 years is inadequate to evaluate either channel stability (over a range of flows) or the influence of the proposed work on spawning success.
- The channel design appears to be based solely on computer models. The models used are recognized as a valuable design tool and are widely used. However, it would be prudent to view results derived from such models as a starting point against which to compare and refine empirically-based channel geometry relationships.

5. Local involvement (including environmental compliance). Fairly well-defined, including appropriate landowner and local agency support, and that regular progress reports will be provided to the Cosumnes River Task Force. The project applicant states that a single report of results is to be issued at the end of year three, although the CALFED PSP clearly states that quarterly reports are required.

Environmental Compliance. Appropriately discussed in some detail. However, the proposal states that the landowner is to be responsible for obtaining any and all permits. It's questionable whether the landowner has the expertise to complete all the necessary state and federal permits, and it's unclear whether the budget includes funding to cover this expense if outside support becomes necessary.

6. Cost. There is a significant cost associated with moving and cleansing the project areas gravels. Although not specified, it could be as much as 50 to 75 percent of the projected construction costs of \$370,000 (\$187,000 to \$280,000). The project proponent hasn't made a compelling argument that such work is necessary, nor that the benefits of this project element have a high likelihood of being realized (see comments above in item 4).

7. Cost sharing. Yes, a small contribution of \$16,000 by NRCS.

8. Additional comments. The conceptual model is not well developed, and the stated hypothesis is not well supported by the monitoring program. Further, the project proponent is confused about whether this is a demonstration project, research or both. (It's a demonstration project).

Regional Ranking

Panel Ranking: Medium low

Provide a brief explanation of your ranking: A project for this site is needed, but this project is not the right project. If this project is funded, we recommend the proposal be revised to address the deficiencies noted above and in the technical reviews.

A project at this site has the potential to improve an area of instability that very likely is having local and off site impacts on salmonid spawning and post-emergent juvenile habitat quality. However, the panel believes the final project design would greatly benefit from the expertise of a geomorphologist and riparian ecologist.